

Application No.: 10/518,904

OCT 18 2007

AMENDMENTS TO THE CLAIMS:*Please amend the claims as follows:*

1. (Currently amended) A loudspeaker comprising:

a hollow frame having opening sections at its upper side and lower side;

a hat-shaped yoke whose both ends are supported by an inner wall of the frame;

a ring-shaped first magnet being coupled with an upper surface of an outer periphery of the yoke;

a columnar second magnet being coupled with an inner bottom of a middle section of the yoke;

a ring-shaped first plate being coupled with an upper surface of the first magnet;

a plate-type second plate being coupled with a lower surface of the second magnet;

a first diaphragm whose outer periphery is fixed to an upper opening of the frame;

a second diaphragm whose outer periphery is fixed to a lower opening of the frame;

a ring-shaped first voice coil whose one end is fixed to the first diaphragm and other end is placed at a first magnetic gap formed between an inner peripheral surface of the first plate and an outer peripheral surface of the middle section of the yoke; and

a second voice coil whose one end is fixed to the second diaphragm and other end is placed at a second magnetic gap formed between an ~~inner~~ outer peripheral surface of the second plate and an inner peripheral surface of the middle section of the yoke,

wherein the frame is integrated with the yoke in assembling the frame, and

an upper surface of the yoke is integrated as a reference plane in mounting for a mold of the frame, thereby an interval-accuracy between the first diaphragm and the yoke can be improved as compared with an interval-accuracy between the second diaphragm and the yoke.

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2. (Currently amended) A loudspeaker comprising:

a hollow frame having opening sections at its upper side and lower side;

a hat-shaped yoke whose both ends are supported by an inner wall of the frame;

a ring-shaped first magnet being coupled with an upper surface of an outer periphery of the yoke;

a columnar second magnet being coupled with an inner bottom of a middle section of the yoke;

a ring-shaped first plate being coupled with an upper surface of the first magnet;

a plate-type second plate being coupled with a lower surface of the second magnet;

a first diaphragm whose outer periphery is fixed to an upper opening of the frame;

a second diaphragm whose outer periphery is fixed to a lower opening of the frame;

a ring-shaped first voice coil whose one end is fixed to the first diaphragm and other end is placed at a first magnetic gap formed between an inner peripheral surface of the first plate and an outer peripheral surface of the middle section of the yoke; and

a second voice coil whose one end is fixed to the second diaphragm and other end is placed at a second magnetic gap formed between an ~~inner~~ outer peripheral surface of the second plate and an inner peripheral surface of the middle section of the yoke,

wherein the frame is integrated with an outer peripheral part of a connected-component which is formed by coupling the yoke with the first magnet and the first plate, and

an upper surface of the yoke is integrated as a reference plane in mounting for a mold of the frame, thereby an interval-accuracy between the first diaphragm and the yoke can be improved as compared with an interval-accuracy between the second diaphragm and the yoke.

3-4. (Cancelled)

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5. (Currently amended) A loudspeaker comprising:

- a hollow frame having opening sections at its upper side and lower side;
- a hat-shaped yoke whose both ends are supported by an inner wall of the frame;
- a ring-shaped first magnet being coupled with an upper surface of an outer periphery of the yoke;
- a columnar second magnet being coupled with an inner bottom of a middle section of the yoke;
- a ring-shaped first plate being coupled with an upper surface of the first magnet;
- a plate-type second plate being coupled with a lower surface of the second magnet;
- a first diaphragm whose outer periphery is fixed to an upper opening of the frame;
- a second diaphragm whose outer periphery is fixed to a lower opening of the frame;
- a ring-shaped first voice coil whose one end is fixed to the first diaphragm and other end is placed at a first magnetic gap formed between an inner peripheral surface of the first plate and an outer peripheral surface of the middle section of the yoke; and
- a second voice coil whose one end is fixed to the second diaphragm and other end is placed at a second magnetic gap formed between an inner outer peripheral surface of the second plate and an inner peripheral surface of the middle section of the yoke,

wherein the frame is integrated with the yoke in assembling the frame, a lower surface of the yoke is integrated as a reference plane in mounting for a mold of the frame, thereby an interval-accuracy between the second diaphragm and the yoke can be improved as compared with an interval-accuracy between the first diaphragm and the yoke.

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6. (Currently amended) A loudspeaker comprising:

- a hollow frame having opening sections at its upper side and lower side;
- a hat-shaped yoke whose both ends are supported by an inner wall of the frame;
- a ring-shaped first magnet being coupled with an upper surface of an outer periphery of the yoke;
- a columnar second magnet being coupled with an inner bottom of a middle section of the yoke;
- a ring-shaped first plate being coupled with an upper surface of the first magnet;
- a plate-type second plate being coupled with a lower surface of the second magnet;
- a first diaphragm whose outer periphery is fixed to an upper opening of the frame;
- a second diaphragm whose outer periphery is fixed to a lower opening of the frame;
- a ring-shaped first voice coil whose one end is fixed to the first diaphragm and other end is placed at a first magnetic gap formed between an inner peripheral surface of the first plate and an outer peripheral surface of the middle section of the yoke; and
- a second voice coil whose one end is fixed to the second diaphragm and other end is placed at a second magnetic gap formed between an ~~inner~~ outer peripheral surface of the second plate and an inner peripheral surface of the middle section of the yoke,

wherein the frame is integrated with an outer peripheral part of a connected-component which is formed by coupling the yoke with the first magnet and the first plate, and a lower surface of the yoke is integrated as a reference plane in mounting for a mold of the frame, thereby an interval-accuracy between the second diaphragm and the yoke can be improved as compared with an interval-accuracy between the first diaphragm and the yoke.